

[illegible]

[illegible]

```

LL               IIIIII               SSSSSSSS
LL               IIIIII               SSSSSSSS
LL               II                SS
LL               II                SS
LL               II                SS
LL               II                SS
LL               II                SSSSSS
LL               II                SSSSSS
LL               II                SS
LL               II                SS
LL               II                SS
LL               II                SS
LLLLLLLLLLLLLL  IIIIII               SSSSSSSS
LLLLLLLLLLLLLL  IIIIII               SSSSSSSS

```


(2) 58
(3) 134

DECLARATIONS
COBRTL Vector

```
0000 1 .TITLE COBSVECTOR - Entry vectors for COBRTL.EXE
0000 2 .IDENT /1-009/ ; File: COBSVECTOR.MAR Edit: LGB1009
0000 3
0000 4
0000 5 *****
0000 6
0000 7 *
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0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 ++
0000 30 FACILITY: Run-Time Library - COBOL Language Support
0000 31
0000 32 ABSTRACT:
0000 33
0000 34 This module contains the entry vector definitions for the
0000 35 VAX-11 Run-Time Library shareable image COBRTL.EXE
0000 36
0000 37 ENVIRONMENT: User mode, AST Reentrant
0000 38
0000 39 AUTHOR: Steven B. Lionel, CREATION DATE: 29-October-1982
0000 40
0000 41 MODIFIED BY:
0000 42
0000 43 1-001 - Original. SBL 29-October-1982
0000 44 1-002 - Add entry for COB$$HANDLER so that VMSRTL can reference the mask.
0000 45 SBL 11-May-1983
0000 46 1-003 - Add new entries for COB$DISPLAY and COB$POS_ERASE. LEB 20-May-1983
0000 47 1-004 - Add all COBOL code that can be shared. LEB 23-May-1983
0000 48 1-005 - Take out COB$$RESTVA (found during an RTL test build, so no affect
0000 49 on programs). LEB 24-May-1983
0000 50 1-006 - Change reference from COB$DISPLAY SCR to COB$DISP SCR as well as
0000 51 COB$DISPLAY SCR NO ADV to COB$DISP SCR NO ADV. LEB 25-May-1983
0000 52 1-007 - Add entry COB$ACC SCR to module COB$ACCEPT. LEB 22-Aug-1983
0000 53 1-008 - add entry COB$$RET A AB PREV to module COB$DISPLAY. MDL 29-Aug-1983
0000 54 1-009 - Add entries COB$POS_ACCEPT and COB$POS_DISPLAY to COB$POS_ERASE.
0000 55 LGB 27-Feb-1984
0000 56 --
```



```
0000 58      .SBTTL  DECLARATIONS
0000 59      :
0000 60      : LIBRARY MACRO CALLS:
0000 61      :
0000 62      : NONE
0000 63      :
0000 64      : EXTERNAL DECLARATIONS:
0000 65      :
0000 66      : .DSABL  GBL                ; Force all external symbols to be declared
0000 67      :
0000 68      : MACROS:
0000 69      :
0000 70      :
0000 71      :+
0000 72      : Macro to define an entry vector for a CALL entry point
0000 73      :-
0000 74      :
0000 75      : .MACRO  VCALL      NAME, ALTMSK
0000 76      : .EXTRN      NAME
0000 77      : .TRANSFER      NAME
0000 78      : .IF B ALTMSK
0000 79      : .MASK        NAME
0000 80      : .IFF
0000 81      : .MASK        ALTMSK
0000 82      : .ENDC
0000 83      : JMP          NAME+2
0000 84      : .ENDM
0000 85      :
0000 86      :+
0000 87      : Macro to define an entry vector for a JSB entry point
0000 88      :-
0000 89      :
0000 90      : .MACRO  VJSB      NAME
0000 91      : .EXTRN      NAME
0000 92      : .TRANSFER      NAME
0000 93      : JMP          NAME
0000 94      : .BLKB        2
0000 95      : .ENDM
0000 96      :
0000 97      :+
0000 98      : Macro to define an entry vector for a condition handler whose actual
0000 99      : routine address has a different name from the vector entry.
0000 100     :-
0000 101     :
0000 102     : .MACRO  VHANDL     NAME, INTNAME
0000 103     : .EXTRN      INTNAME
0000 104     : NAME::
0000 105     : .TRANSFER      NAME
0000 106     : .MASK        INTNAME
0000 107     : JMP          INTNAME+2
0000 108     : .ENDM
0000 109     :
0000 110     :+
0000 111     : Macro to define an alias for the next vectored entry point
0000 112     :-
0000 113     :
0000 114     : .MACRO  ALIAS      NAME
```

COBSVECTOR
1-009

- Entry vectors for COBRTL.EXE
DECLARATIONS

B 6

15-SEP-1984 23:38:08
6-SEP-1984 10:49:39

VAX/VMS Macro V04-00
[COBRTL.SRC]COBVECTOR.MAR;1

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0000	115	.TRANSFER	NAME
0000	116	.ENDM	
0000	117		
0000	118		
0000	119		
0000	120	EQUATED SYMBOLS:	
0000	121		
0000	122	NONE	
0000	123		
0000	124	OWN STORAGE:	
0000	125		
0000	126	NONE	
0000	127		
0000	128	PSECT DECLARATIONS:	
0000	129		
00000000	130	.PSECT \$COBSVECTOR	PIC, USR, CON, REL, LCL, SHR, -
0000	131		EXE, RD, NOWRT, LONG
0000	132		


```
0000 134      .SBTTL  COBRTL Vector
0000 135
0000 136 :+
0000 137 : Define vectored entry points for the COBOL Language Support procedures
0000 138 : by module in alphabetical order.
0000 139 :-
0000 140 : Any additions to this file should be reflected in
0000 141 : COMS:COBRTLVEC.DAT. All new entry points must be appended to the end
0000 142 : of the list. NEVER change existing entries unless you are sure that
0000 143 : what you do won't break existing programs.
0000 144 :-
0000 145
0000 146 : Module COB$$HANDLER
0000 147      VHANDL  COB$HANDLER      COB$$HANDLER
0008 148
0008 149 : Module COB$ACCEPT
0008 150      VCALL   COB$ACCEPT
0010 151
0010 152 : Module COB$ACC_DATE
0010 153      VCALL   COB$ACC_DATE
0018 154
0018 155 : Module COB$ACC_DAY
0018 156      VCALL   COB$ACC_DAY
0020 157
0020 158 : Module COB$ACC_DAYWEEK
0020 159      VCALL   COB$ACC_DAYWEEK
0028 160
0028 161 : Module COB$ACC_TIME
0028 162      VCALL   COB$ACC_TIME
0030 163
0030 164 : Module COB$CVTPQ_R9
0030 165      VJSB     COB$CVTPQ_R9
0038 166
0038 167 : Module COB$CVTQP_R9
0038 168      VJSB     COB$CVTQP_R9
0040 169
0040 170 : Module COB$CVTRPQ_R9
0040 171      VJSB     COB$CVTRPQ_R9
0048 172
0048 173 : Module COB$CVTRQP_R9
0048 174      VJSB     COB$CVTRQP_R9
0050 175
0050 176 : Module COB$DISPLAY
0050 177      VCALL   COB$DISPLAY
0058 178      VCALL   COB$DISP_NO_ADV
0060 179
0060 180 : Module COB$DIVQ_R8
0060 181      VJSB     COB$DIVQ_R8
0068 182
0068 183 : Module COB$ERROR
0068 184      VCALL   COB$ERROR
0070 185
0070 186 : Module COB$INTARI
0070 187      VCALL   COB$ADDI
0078 188      VCALL   COB$CMPI
0080 189      VCALL   COB$DIVI
0088 190      VCALL   COB$DIVI_OSE
```

```
0090 191          VCALL COB$MULTI
0098 192          VCALL COB$SUBI
00A0 193
00A0 194 ; Module COB$INTER
00A0 195          VJSB COB$CVTDI-R7
00A8 196          VJSB COB$CVTFI-R7
00B0 197          VJSB COB$CVTID-R7
00B8 198          VJSB COB$CVTIF-R7
00C0 199          VJSB COB$CVTIL-R8
00C8 200          VJSB COB$CVTIP-R9
00D0 201          VJSB COB$CVTIQ-R8
00D8 202          VJSB COB$CVTIW-R8
00E0 203          VJSB COB$CVTLI-R8
00E8 204          VJSB COB$CVTPI-R9
00F0 205          VJSB COB$CVTQI-R8
00F8 206          VJSB COB$CVTRIC-R8
0100 207          VJSB COB$CVTRIP-R9
0108 208          VJSB COB$CVTRIQ-R8
0110 209          VJSB COB$CVTRIW-R8
0118 210          VJSB COB$CVTTI-R8
0120 211          VJSB COB$CVTWI-R8
0128 212
0128 213 ; Module COB$IOEXCEPTION
0128 214          VCALL COB$IOEXCEPTION
0130 215
0130 216 ; Module COB$MULQ_R8
0130 217          VJSB COB$MULQ_R8
0138 218
0138 219 ; Module COB$PAUSE
0138 220          VCALL COB$PAUSE
0140 221
0140 222 ;+
0140 223 ; End of initial COBRTL vector. All subsequent additions must be made
0140 224 ; after this point.
0140 225 ; -
0140 226
0140 227 ;+
0140 228 ; The following entry is present so that the vector of VMSRTL can reference
0140 229 ; the mask of COB$$HANDLER.
0140 230 ; -
0140 231
0140 232 ; Module COB$$HANDLER
0140 233          VCALL COB$$HANDLER
0148 234
0148 235 ;+
0148 236 ; Add the following entries for the new version of COBOL.
0148 237 ; -
0148 238
0148 239 ; Module COB$DISPLAY
0148 240          VCALL COB$DISP_SCR
0150 241          VCALL COB$DISP_SCR_NO_ADV
0158 242
0158 243 ; Module COB$POS_ERASE
0158 244          VCALL COB$POS_ERASE
0160 245
0160 246
0160 247 ;+
```



```
0160 248 ; Add all remaining COBOL specific code that can be shared (note that
0160 249 ; the exceptions are tables, COB$FIND NAME, COB$CALL, COB$CANCEL,
0160 250 ; COB$RMS_BLOCKS, COB$DHANDL, COB$$RESTVA.
0160 251 ;
0160 252 ;
0160 253 ;
0160 254 ; Module COB$CVTDQ_R8
0160 255 ;
0160 256 ; VJSB COB$CVTDQ_R8
0168 257 ;
0168 258 ; Module COB$CVTFQ_R8
0168 259 ;
0168 260 ; VJSB COB$CVTFQ_R8
0170 261 ;
0170 262 ; Module COB$CVTDQ_R8
0170 263 ;
0170 264 ; VJSB COB$CVTDQ_R8
0178 265 ;
0178 266 ; Module COB$CVTQF_R8
0178 267 ;
0178 268 ; VJSB COB$CVTQF_R8
0180 269 ;
0180 270 ; Module COB$CVTRDQ_R8
0180 271 ;
0180 272 ; VJSB COB$CVTRDQ_R8
0188 273 ;
0188 274 ; Module COB$CVTRFQ_R8
0188 275 ;
0188 276 ; VJSB COB$CVTRFQ_R8
0190 277 ;
0190 278 ; Module COB$DBEXCEPTION
0190 279 ;
0190 280 ; VCALL COB$DBEXCEPTION
0198 281 ;
0198 282 ; Module COB$EXPI
0198 283 ;
0198 284 ; VCALL COB$EXPI
01A0 285 ; VCALL COB$EXPI_OSE
01A8 286 ;
01A8 287 ; Module COB$LINAGE
01A8 288 ;
01A8 289 ; VCALL COB$INIT_LINAGE
01B0 290 ; VCALL COB$LINAGE
01B8 291 ; VCALL COB$TERM_LINAGE
01C0 292 ;
01C0 293 ; Module COB$SET_SWITCH
01C0 294 ;
01C0 295 ; VCALL COB$SET_SWITCH
01C8 296 ;
01C8 297 ; Module COB$SWITCH
01C8 298 ;
01C8 299 ; VCALL COB$SWITCH
01D0 300 ;
01D0 301 ; Module COB$ACCEPT (new entry to an already existing shared module)
01D0 302 ;
01D0 303 ; VCALL COB$ACC_SCR
01D8 304 ;
```

COB\$VECTOR
1-009

- Entry vectors for COBRTL.EXE
COBRTL Vector

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```
01D8 305 ; Module COB$DISPLAY (new entry to an already existing shared module)
01D8 306
01D8 307 VCALL COB$$RET_A_AB_PREV
01E0 308
01E0 309 ; Module COB$POS_ERASE (new entries to an already existing shared module)
01E0 310
01E0 311 VCALL COB$POS_ACCEPT
01E8 312 VCALL COB$POS_DISPLAY
01F0 313
01F0 314 .END
```

; End of module COB\$VECTOR

COB\$VECTOR
Symbol table

- Entry vectors for COBRTL.EXE

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6-SEP-1984 10:49:39

VAX/VMS Macro V04-00
[COBRTL.SRC]COBVECTOR.MAR;1

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COB\$HANDLER	*****	X	01
COB\$RET_A_AB_PREV	*****	X	01
COB\$ACCEPT	*****	X	01
COB\$ACC_DATE	*****	X	01
COB\$ACC_DAY	*****	X	01
COB\$ACC_DAYWEEK	*****	X	01
COB\$ACC_SCR	*****	X	01
COB\$ACC_TIME	*****	X	01
COB\$ADDI	*****	X	01
COB\$CMPI	*****	X	01
COB\$CVTDI_R7	*****	X	01
COB\$CVTDQ_R8	*****	X	01
COB\$CVTFI_R7	*****	X	01
COB\$CVTFQ_R8	*****	X	01
COB\$CVTID_R7	*****	X	01
COB\$CVTIF_R7	*****	X	01
COB\$CVTIL_R8	*****	X	01
COB\$CVTIP_R9	*****	X	01
COB\$CVTIQ_R8	*****	X	01
COB\$CVTIW_R8	*****	X	01
COB\$CVTLI_R8	*****	X	01
COB\$CVTPI_R9	*****	X	01
COB\$CVTPQ_R9	*****	X	01
COB\$CVTQD_R8	*****	X	01
COB\$CVTQF_R8	*****	X	01
COB\$CVTQI_R8	*****	X	01
COB\$CVTQP_R9	*****	X	01
COB\$CVTRDQ_R8	*****	X	01
COB\$CVTRFQ_R8	*****	X	01
COB\$CVTRIL_R8	*****	X	01
COB\$CVTRIP_R9	*****	X	01
COB\$CVTRIQ_R8	*****	X	01
COB\$CVTRIW_R8	*****	X	01
COB\$CVTRPQ_R9	*****	X	01
COB\$CVTRQP_R9	*****	X	01
COB\$CVTTI_R8	*****	X	01
COB\$CVTWI_R8	*****	X	01
COB\$DBEXCEPTION	*****	X	01
COB\$DISPLAY	*****	X	01
COB\$DISP_NO_ADV	*****	X	01
COB\$DISP_SCR	*****	X	01
COB\$DISP_SCR_NO_ADV	*****	X	01
COB\$DIVI	*****	X	01
COB\$DIVI_OSE	*****	X	01
COB\$DIVQ_R8	*****	X	01
COB\$ERROR	*****	X	01
COB\$EXPI	*****	X	01
COB\$EXPI_OSE	*****	X	01
COB\$HANDLER	00000000	RG	01
COB\$INIT_LINAGE	*****	X	01
COB\$IOEXCEPTION	*****	X	01
COB\$LINAGE	*****	X	01
COB\$MULI	*****	X	01
COB\$MULQ_R8	*****	X	01
COB\$PAUSE	*****	X	01
COB\$POS_ACCEPT	*****	X	01
COB\$POS_DISPLAY	*****	X	01

COB\$POS_ERASE	*****	X	01
COB\$SET_SWITCH	*****	X	01
COB\$SUBI	*****	X	01
COB\$SWITCH	*****	X	01
COB\$TERM_LINAGE	*****	X	01

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes															
ABS	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE					
\$COBSVECTOR	000001F0 (496.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG					

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	40	00:00:00.09	00:00:01.95
Command processing	134	00:00:00.33	00:00:02.23
Pass 1	101	00:00:01.05	00:00:05.40
Symbol table sort	0	00:00:00.03	00:00:00.03
Pass 2	70	00:00:00.50	00:00:02.35
Symbol table output	9	00:00:00.04	00:00:00.04
Psect synopsis output	2	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	358	00:00:02.05	00:00:12.04

The working set limit was 900 pages.

7783 bytes (16 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 62 non-local and 0 local symbols.
314 source lines were read in Pass 1, producing 19 object records in Pass 2.
4 pages of virtual memory were used to define 4 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/LIS=LISS:COBVECTOR/OBJ=OBJ\$:COBVECTOR MSRC\$:COBVECTOR/UPDATE=(ENH\$:COBVECTOR)

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